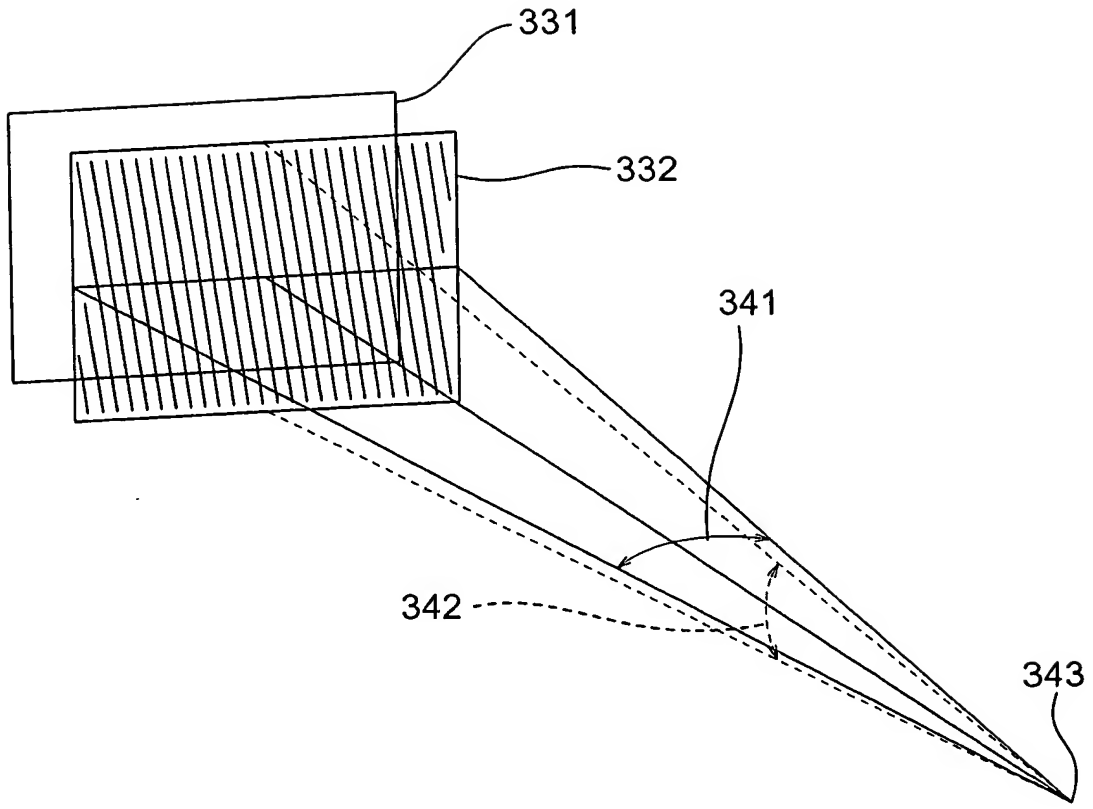


FIG. 1

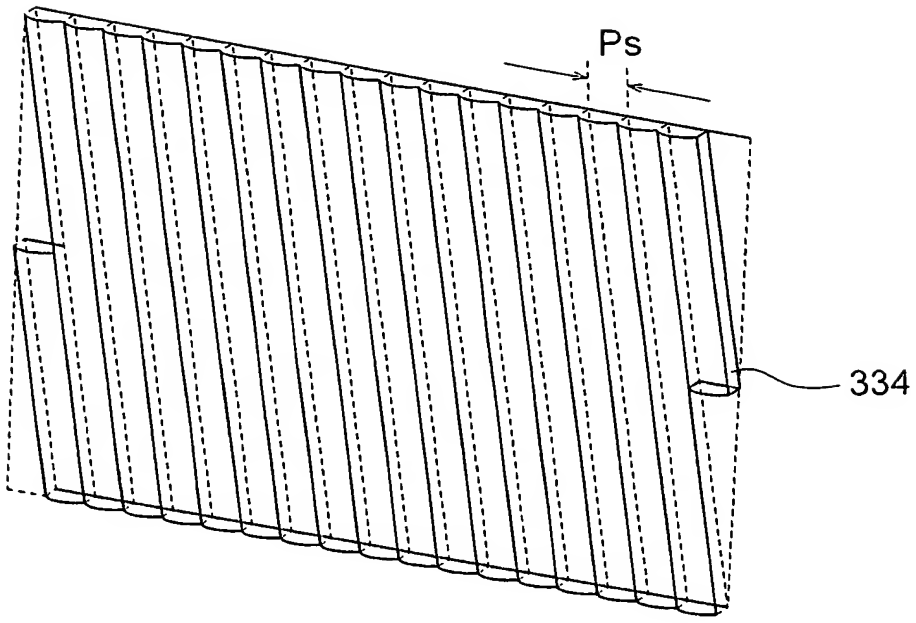


FIG. 2A

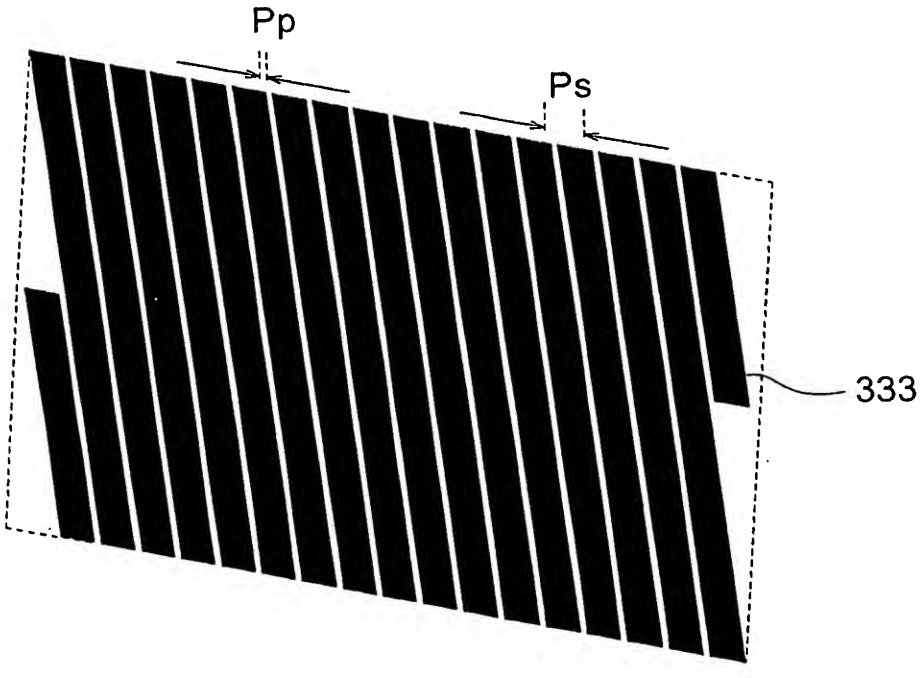


FIG. 2B

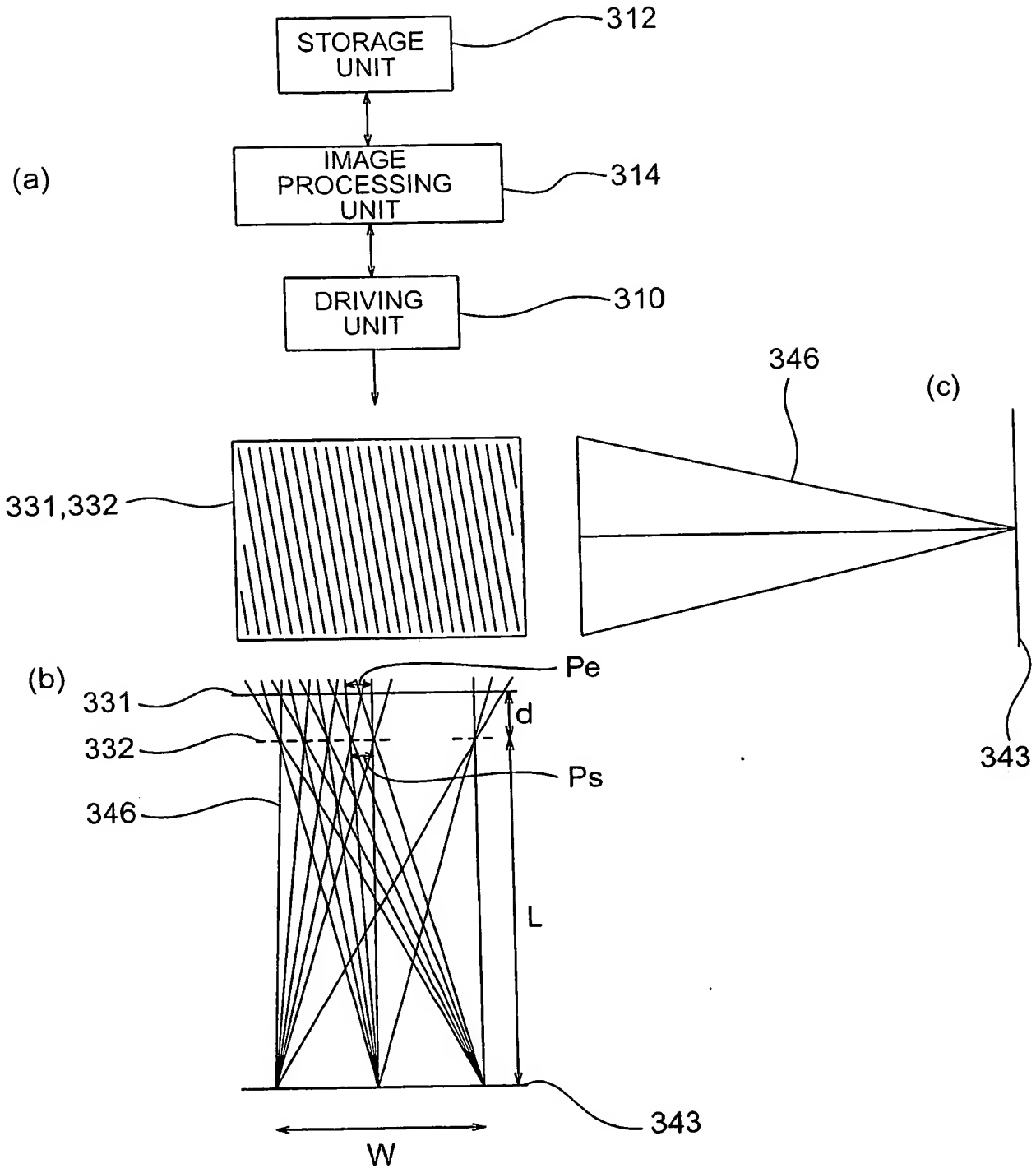
(a)
STORAGE UNIT
312
IMAGE PROCESSING UNIT
314
DRIVING UNIT
310
331,332
346
(c)
343
(b)
Pe
331
332
d
Ps
346
L
343
W

FIG. 3

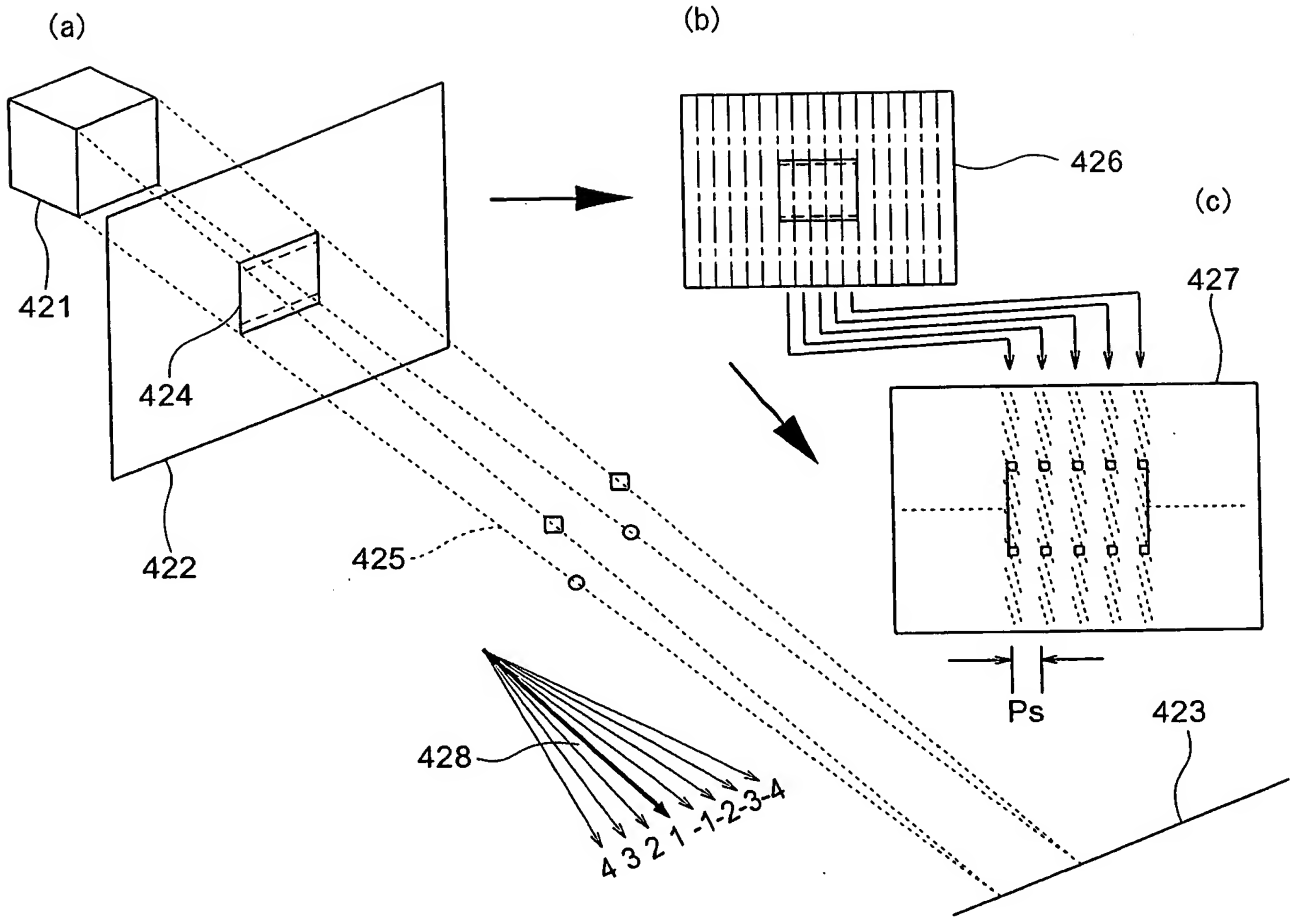


FIG. 4

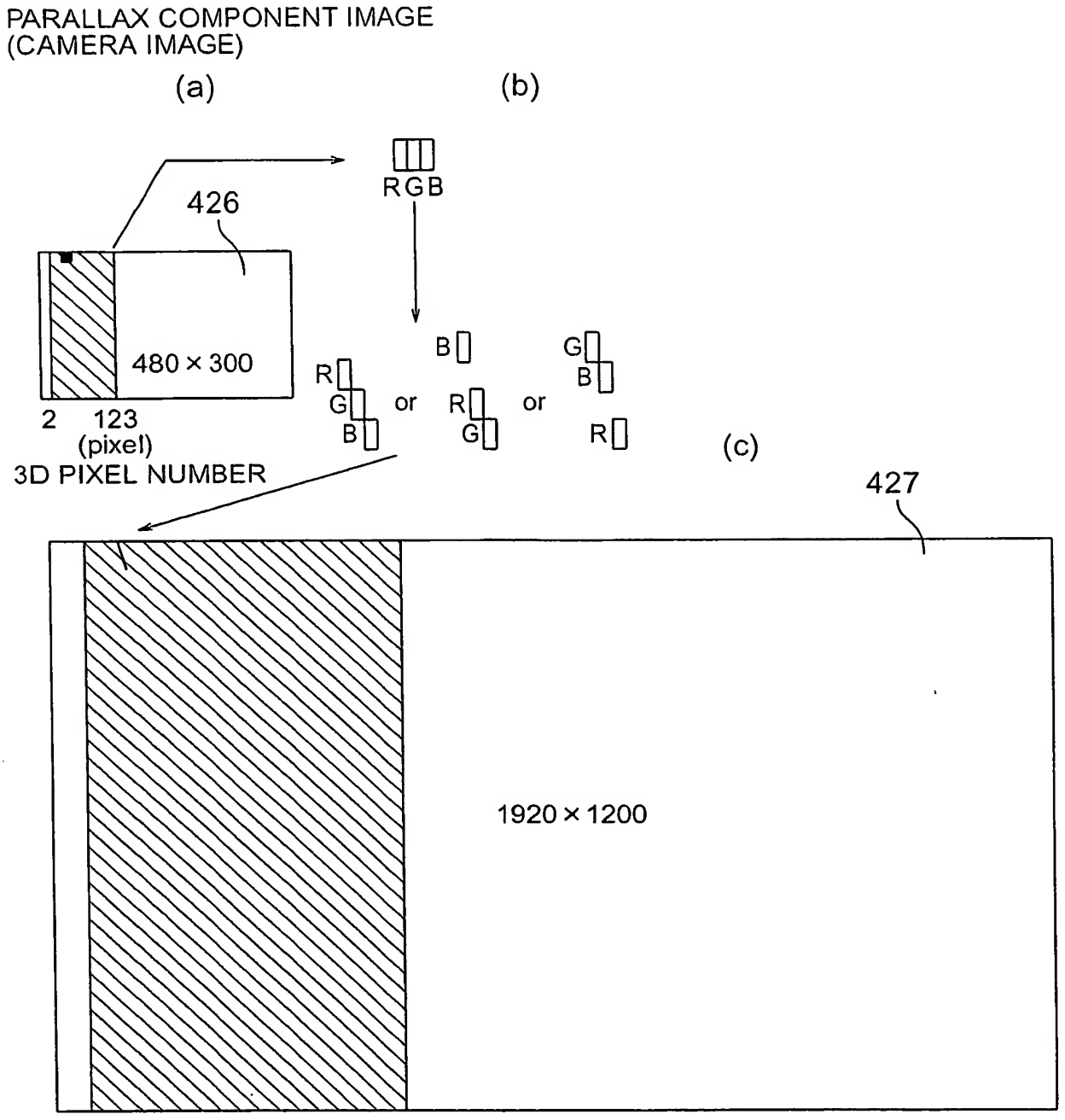
PARALLAX COMPONENT IMAGE
(CAMERA IMAGE)
(a)
(b)
RGB
426
480 × 300
2
123
(pixel)
3D PIXEL NUMBER
R
G
B
or
R
G
B
or
G
B
R
(c)
427
1920 × 1200
PARALLAX INTERLEAVED IMAGE (DISPLAY IMAGE) SUB- PIXEL NUMBER

FIG. 5

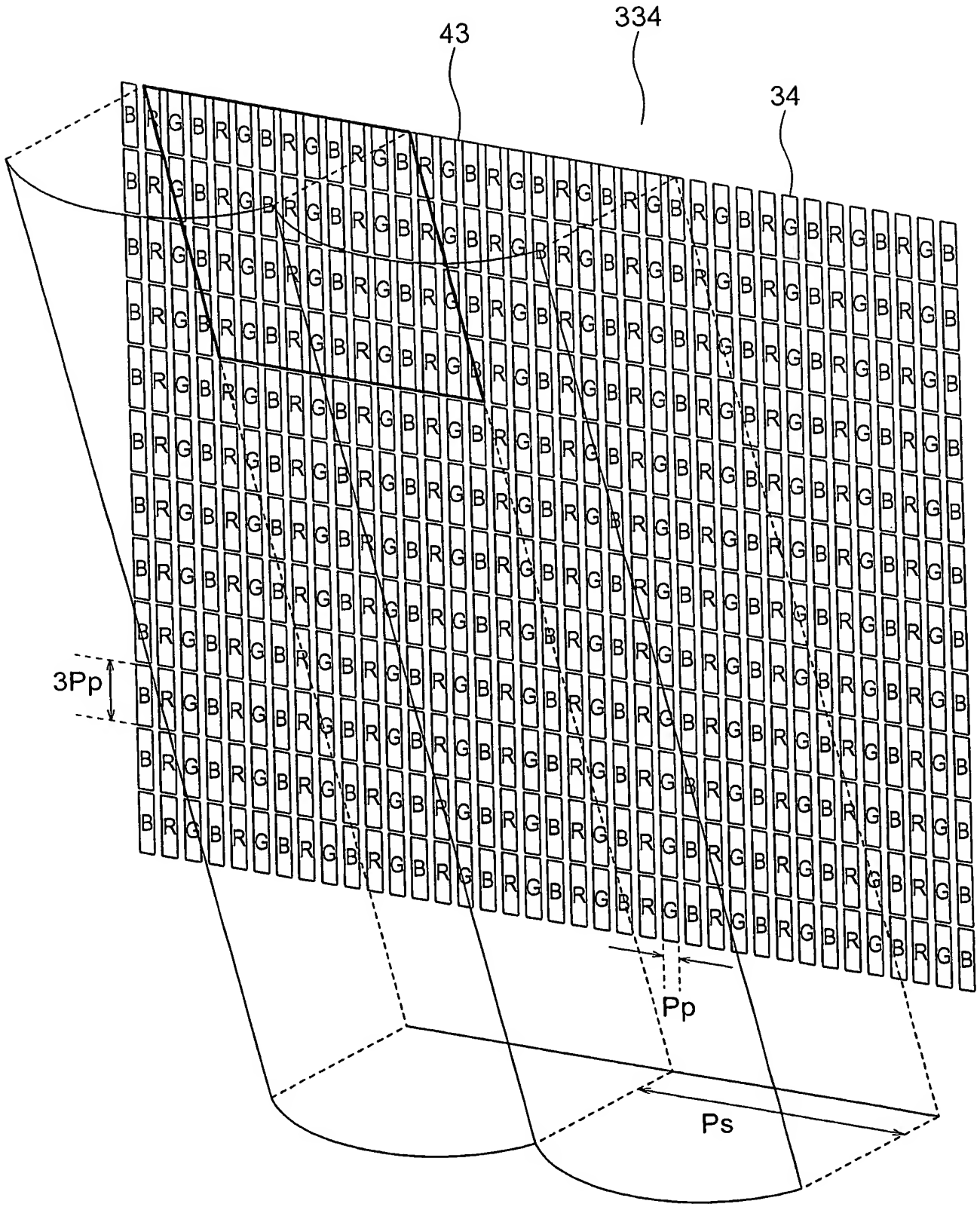


FIG. 6

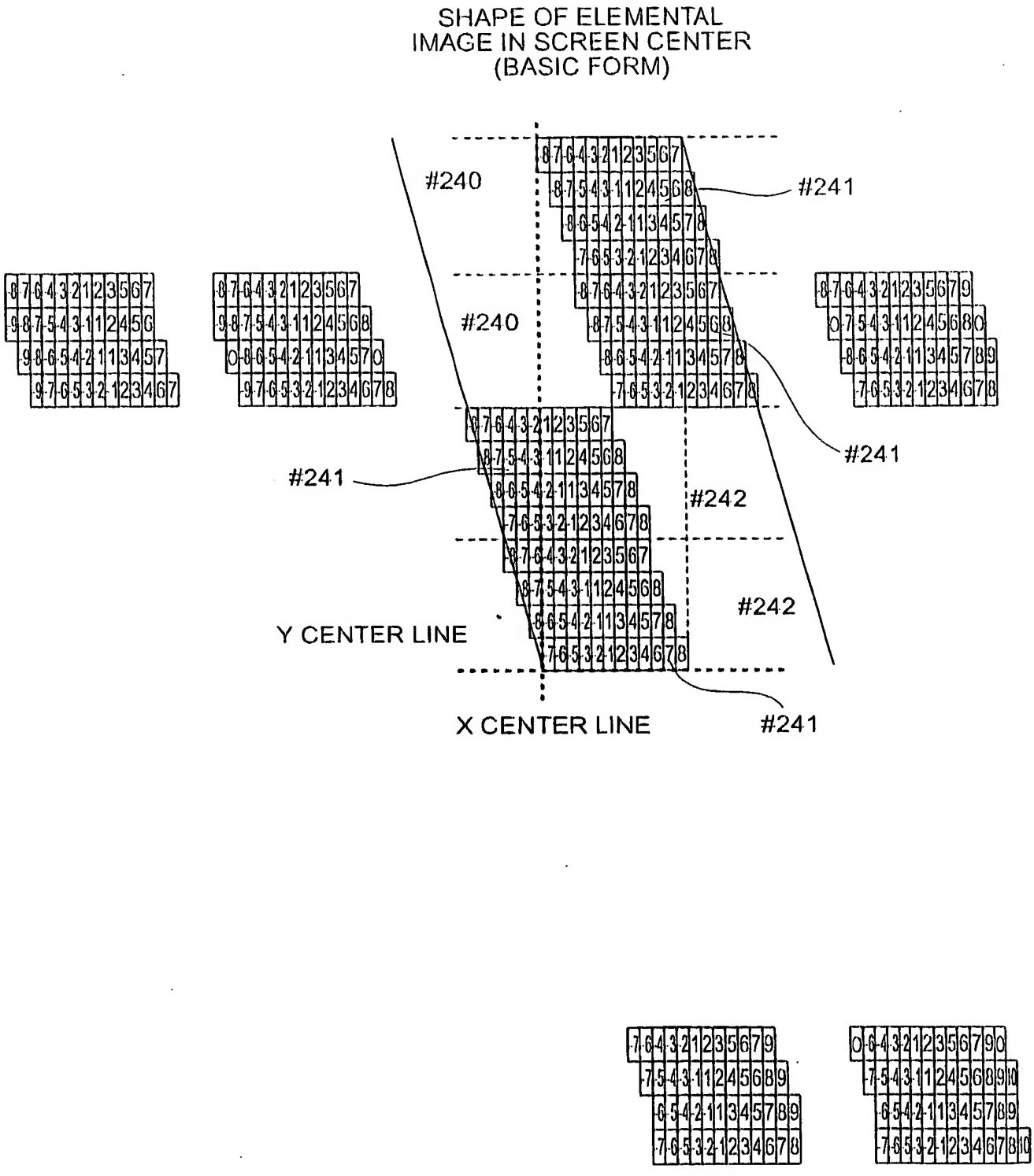
SHAPE OF ELEMENTAL
IMAGE IN SCREEN CENTER
(BASIC FORM)
#240
#241
#240
#241
#241
#242
#242
Y CENTER LINE
X CENTER LINE
#241

FIG. 7

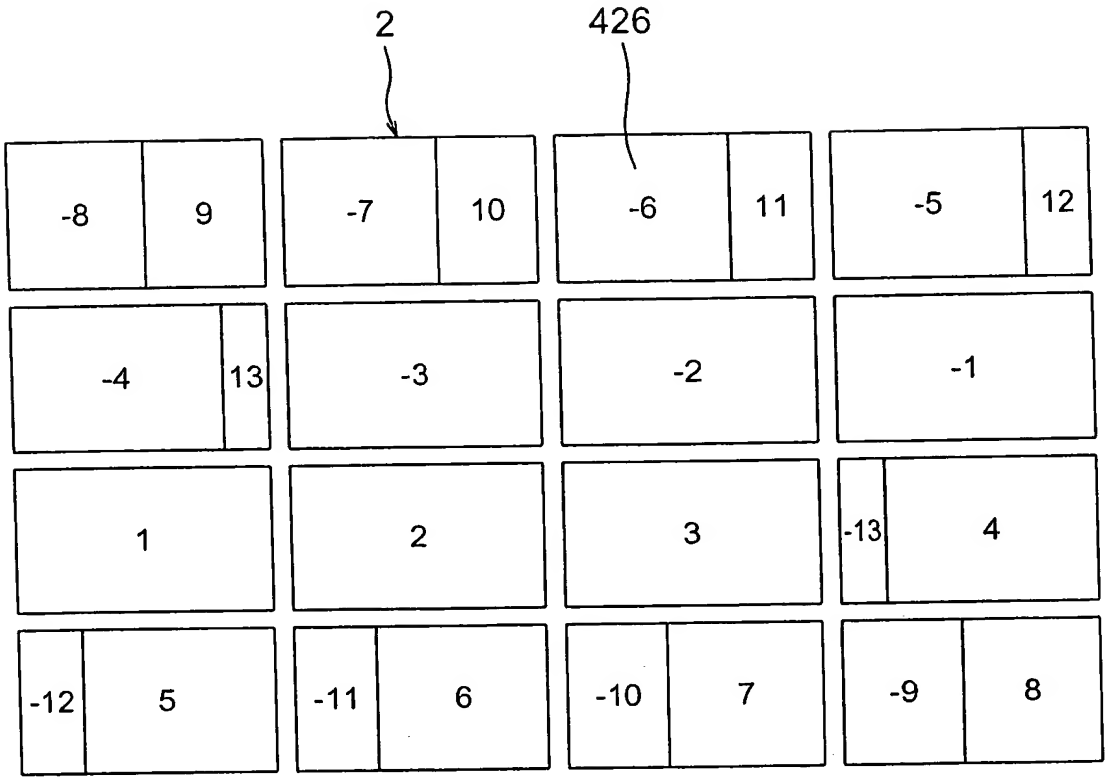


FIG. 8

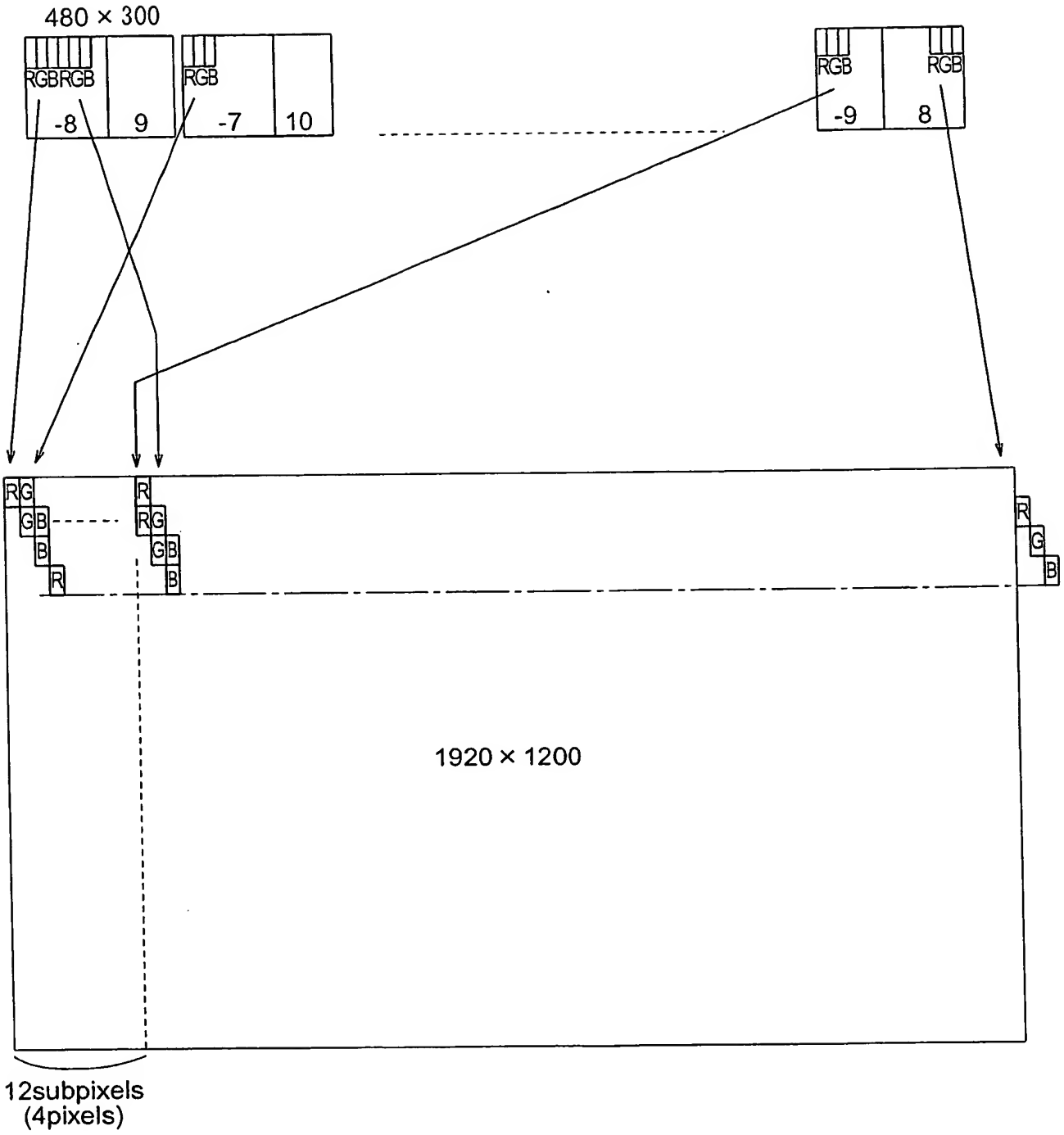
480 × 300
RGBRGB
-8
9
RGB
-7
10
RGB
-9
RGB
8
RG
GB
B
R
R
RG
GB
B
R
G
B
1920 × 1200
12subpixels
(4pixels)

FIG. 9

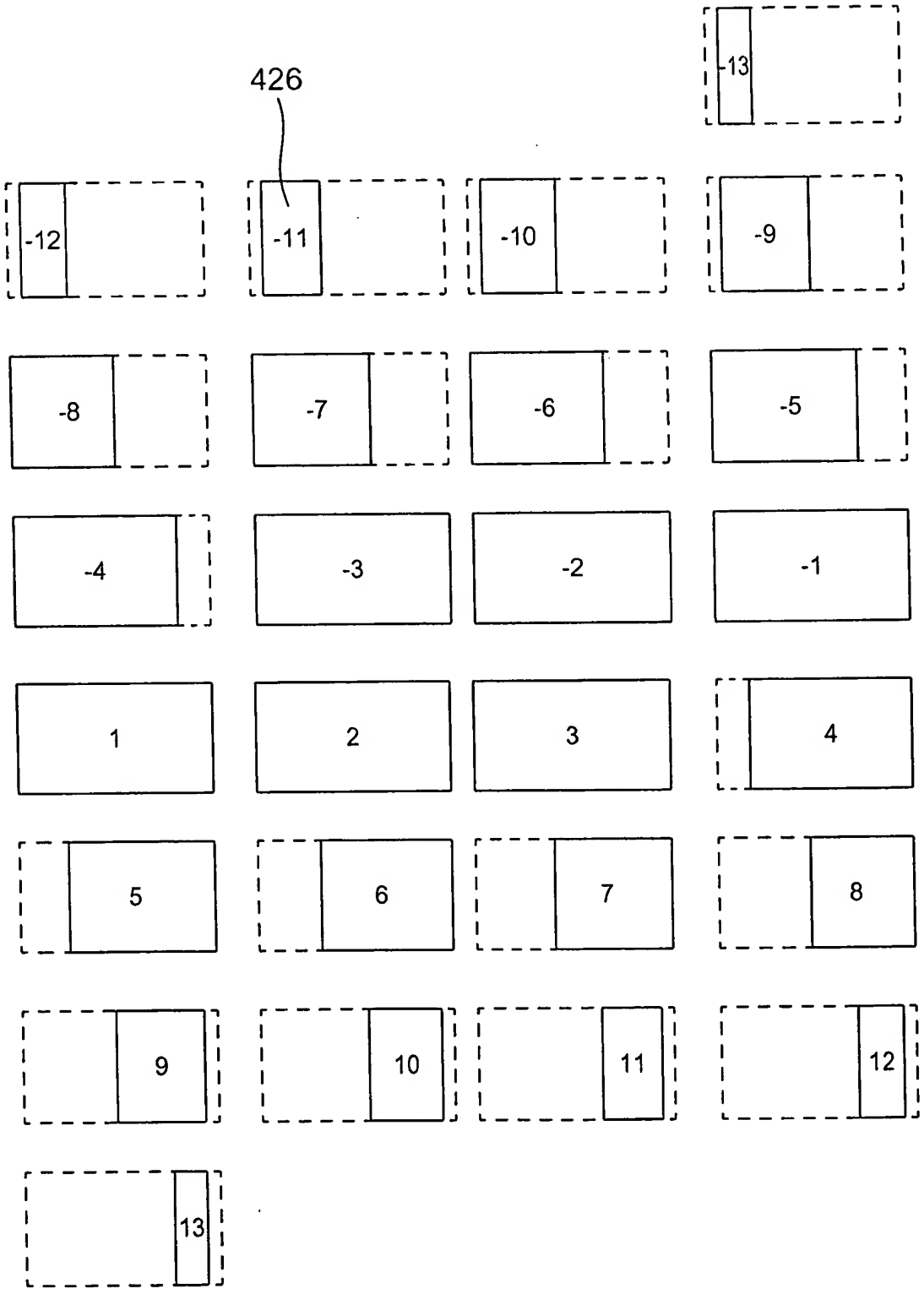


FIG. 10

| PARALLAX NUMBER | 3D PIXEL NUMBER START (LEFT END) | END (RIGHT END) |
|---|---|---|
| -13 | 2 | 30 |
| -12 | 2 | 76 |
| -11 | 2 | 123 |
| -10 | 2 | 170 |
| -9 | 2 | 217 |
| -8 | 1 | 264 |
| -7 | 1 | 311 |
| -6 | 1 | 358 |
| -5 | 1 | 405 |
| -4 | 1 | 451 |
| -3 | 1 | 480 |
| -2 | 1 | 480 |
| -1 | 1 | 480 |
| 1 | 1 | 480 |
| 2 | 1 | 480 |
| 3 | 1 | 480 |
| 4 | 30 | 480 |
| 5 | 76 | 480 |
| 6 | 123 | 480 |
| 7 | 170 | 480 |
| 8 | 217 | 480 |
| 9 | 264 | 479 |
| 10 | 311 | 479 |
| 11 | 358 | 479 |
| 12 | 405 | 479 |
| 13 | 451 | 479 |

FIG. 11

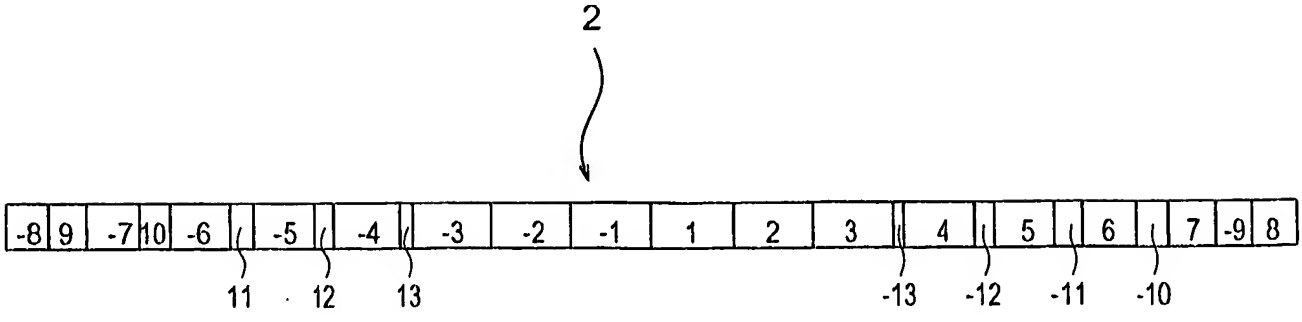


FIG. 12

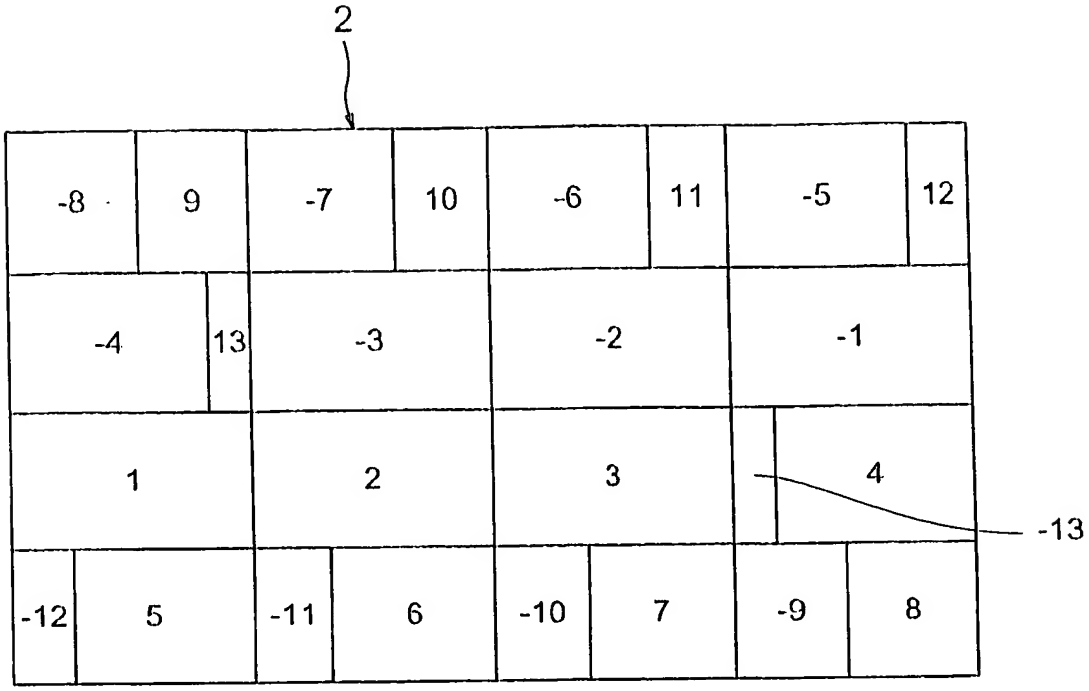
2
-8
9
-7
10
-6
11
-5
12
-4
13
-3
-2
-1
1
2
3
4
-13
-12
5
-11
6
-10
7
-9
8

FIG. 13

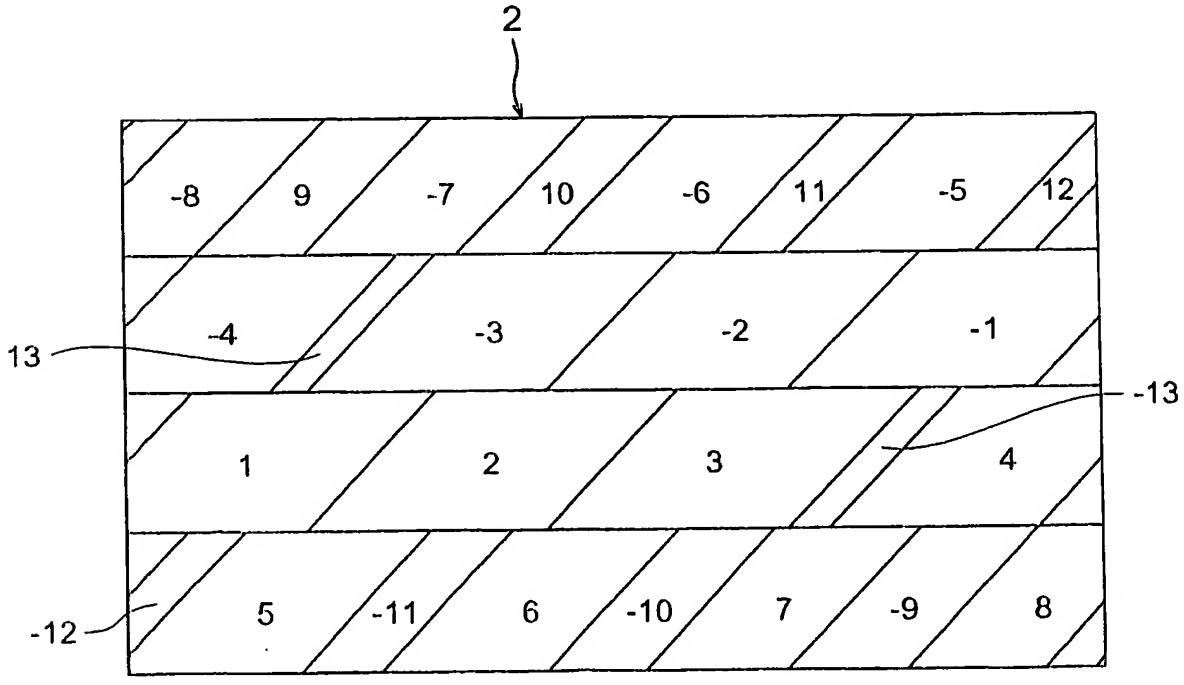
2
-8
9
-7
10
-6
11
-5
12
13
-4
-3
-2
-1
-13
1
2
3
4
-12
5
-11
6
-10
7
-9
8

FIG. 14

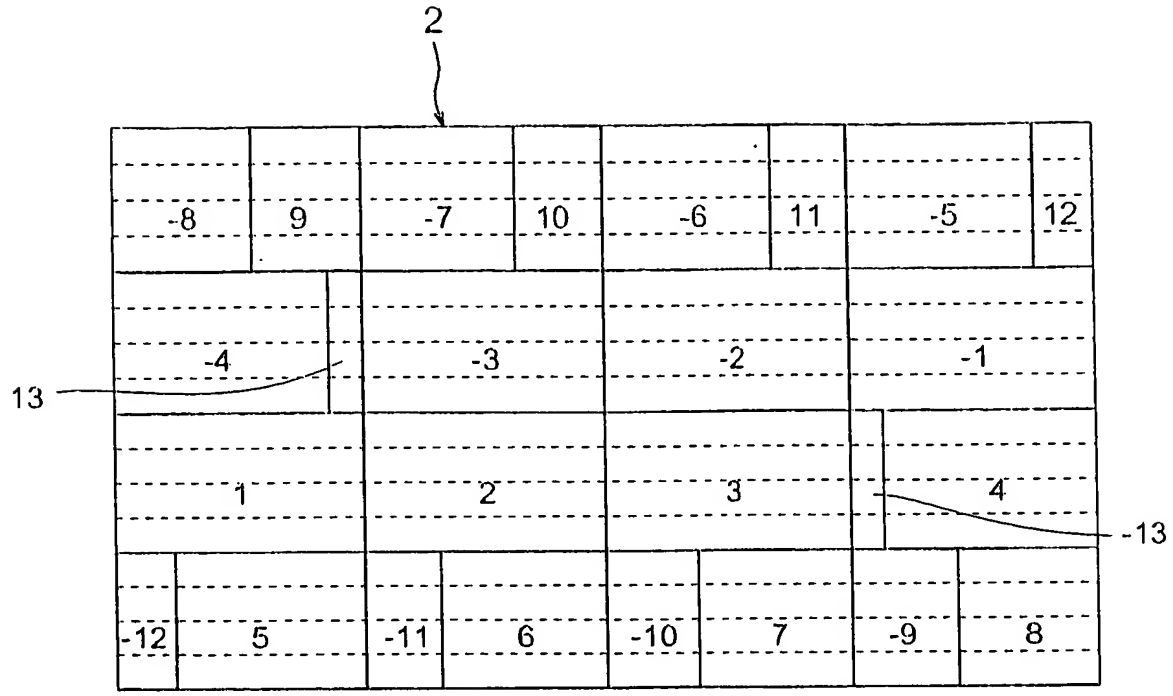
2
-8
9
-7
10
-6
11
-5
12
-4
-3
-2
-1
13
1
2
3
4
-13
-12
5
-11
6
-10
7
-9
8

FIG. 15

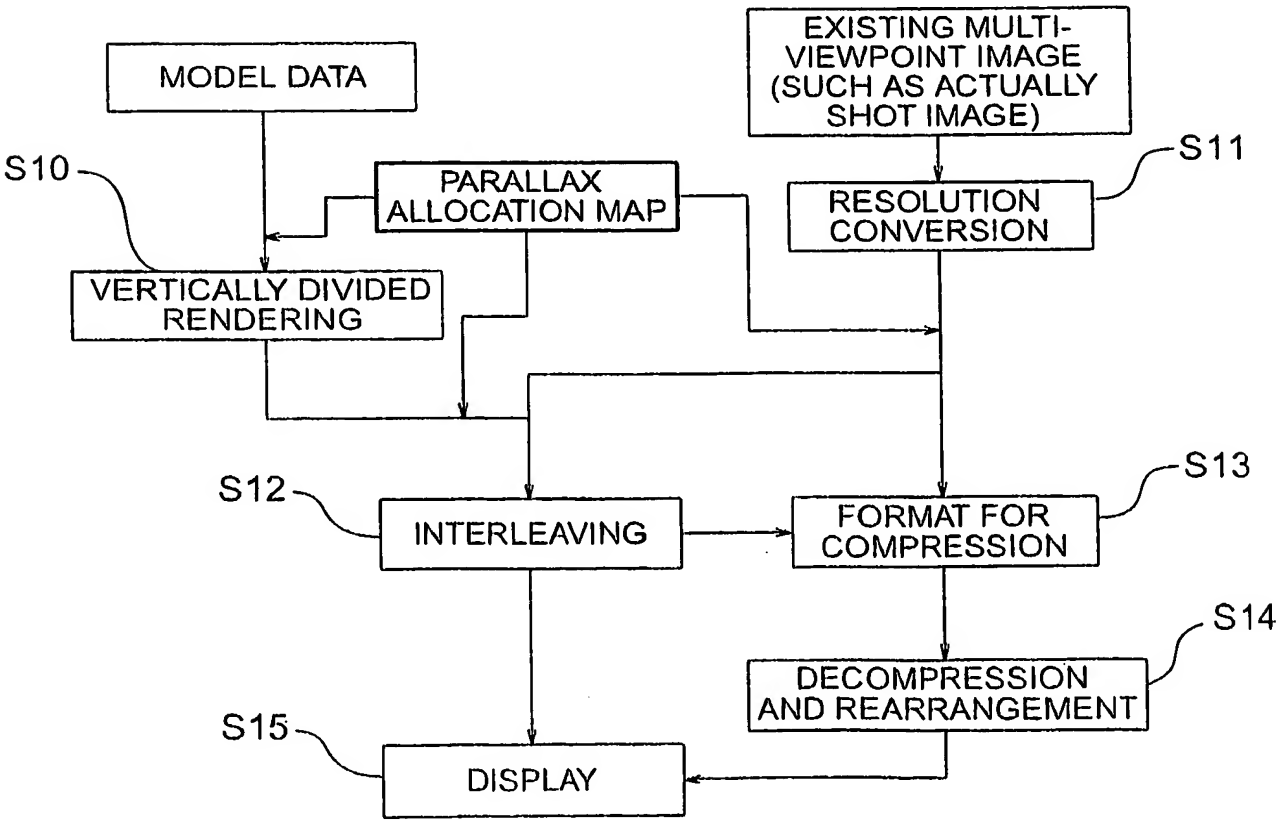
MODEL DATA
EXISTING MULTI-VIEWPOINT IMAGE (SUCH AS ACTUALLY SHOT IMAGE)
S10
PARALLAX ALLOCATION MAP
S11
RESOLUTION CONVERSION
VERTICALLY DIVIDED RENDERING
S12
INTERLEAVING
S13
FORMAT FOR COMPRESSION
S14
DECOMPRESSION AND REARRANGEMENT
S15
DISPLAY

FIG. 16

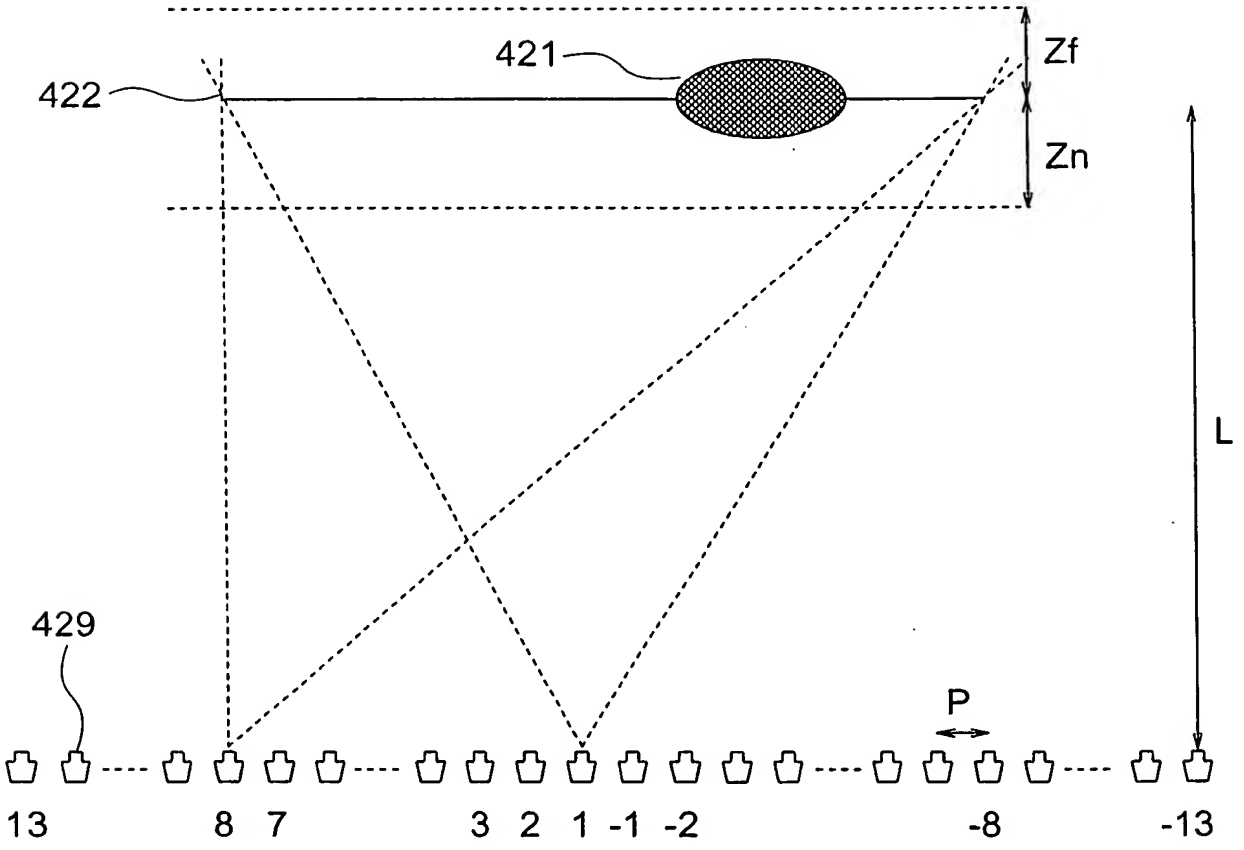


FIG. 17

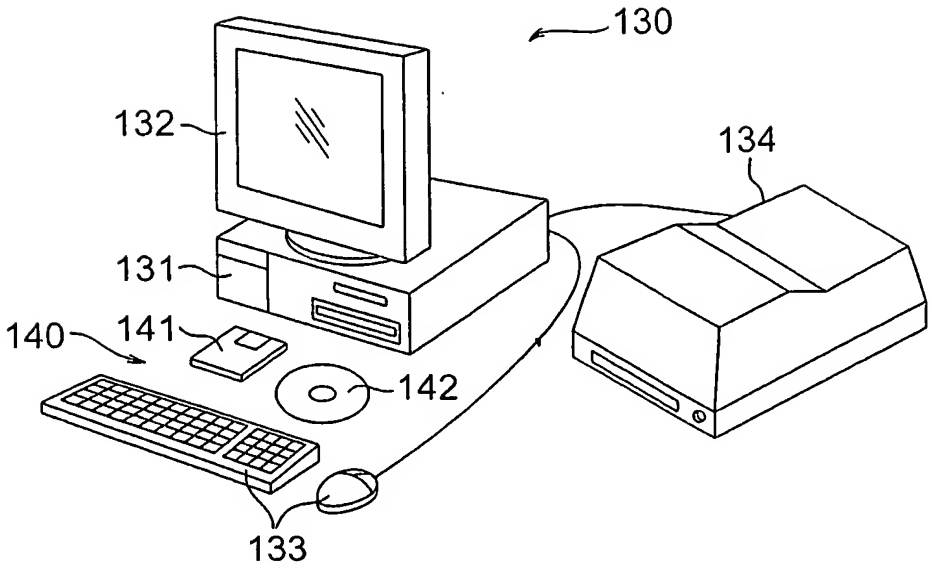
130
132
134
131
140
141
142
133

FIG. 18

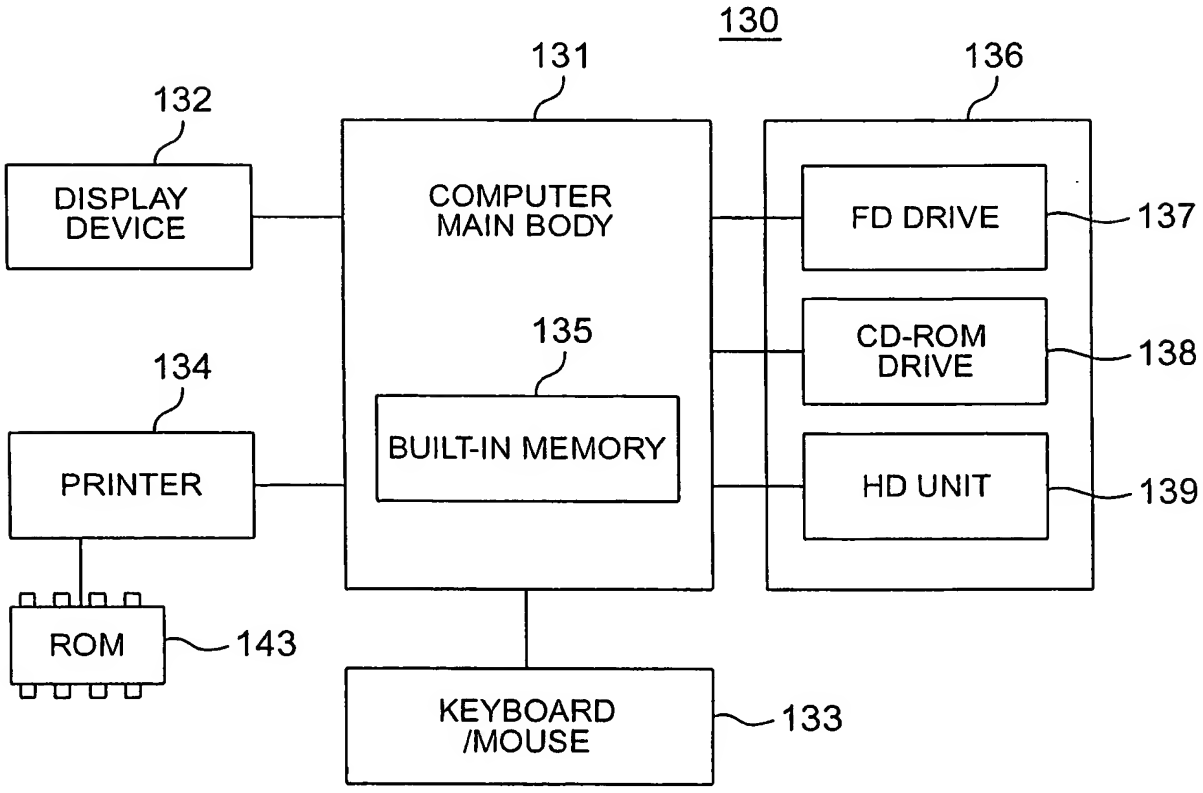
130
131
136
132
DISPLAY DEVICE
COMPUTER MAIN BODY
FD DRIVE
137
135
CD-ROM DRIVE
138
134
PRINTER
BUILT-IN MEMORY
HD UNIT
139
ROM
143
KEYBOARD /MOUSE
133

FIG. 19